

AMENDMENTS TO THE DRAWINGS

The enclosed three sheets of formal drawings replace the drawings filed on October 17, 2003. No changes to the drawings were made.

REMARKS

Claims 1 and 5-19 are pending in the application. Claim 1 has been amended and claims 12-19 have been added. Support for new claims 12-19 may be found at least in paragraphs 14 and 16 of the specification and Figures 2 and 4. In view of the following remarks, reconsideration and allowance of Applicant's claims are respectfully requested.

Drawings

The enclosed three sheets of formal drawings replace the drawings filed on October 17, 2003. No changes to the drawings were made.

35 U.S.C. § 103 Rejections

Claims 1 and 5-11 were rejected under 35 U.S.C. 103(a) as being obvious over Shiery (U.S. Patent No. 5,732,741) in view of Bychinsky (U.S. Patent No. 3,966,015).

Independent claim 1 recites, among other things, a flexible means "wherein the flexible means covers the hole to form a barrier that prevents fluid from flowing through the hole." Neither Shiery nor Bychinsky, alone or in combination, describe or suggest at least this feature of claim 1. Therefore, it is respectfully requested that this rejection be withdrawn.

Shiery is directed to a noise suppressor. In particular, the noise suppressor device 10 of Shiery includes a housing 12, a generally hollow flexible bladder 14, and a spool assembly 16. Col. 3, lines 57-59. The bladder 14 is coaxially positioned within a longitudinally extending bore 18 in the housing 12, and the spool assembly 16 is coaxially positioned within the bladder 14.

Col. 3, lines 59-62. The spool assembly 16 includes a spool layer 80 and a sleeve layer 90. Col. 5, lines 20-21. The spool layer 80 is coaxially positioned within the bladder 14, and the sleeve layer 90 is coaxially positioned on the spool layer 80 and is positioned between the bladder 14 and the spool layer 80. Col. 5, lines 21-22 and 46-48. A plurality of radially extending perforations 88 extend through the spool layer 80. Col. 5, lines 28-29.

However, Shiery fails to describe or suggest a flexible means that covers a hole to form a barrier that prevents fluid from flowing through the hole. The Examiner's Office Action, at page 2, states that "Shiery teaches . . . flexible means (14) . . . wherein the flexible means (14) covers a hole (88) to form a barrier that prevents fluid from flowing through the hole (88)." However, that is not correct. The bladder 14 of Shiery does not cover perforations 88, and fluid is not prevented from flowing through perforations 88. Quite the contrary -- the operation of the noise suppressor of Shiery depends upon fluid flowing through the perforations 88.

As described at column 6, lines 38-50 of Shiery, "[i]n operation, it is envisioned that the sleeve layer 90 will provide a tortuous path for the fluid to flow from the axial bore 87 through the perforations 88, . . . between the overlapped layers of the sleeve layer 90, . . . and finally contacting the bladder 14. Alternatively, it is envisioned that the sleeve layer [90] will expand with the bladder [14] surface and partially unwrap as the bladder compresses, with little or no fluid flow between the overlapped layers. However, in either mode of operation, any fluid flowing through the noise suppressor device 10 will be exposed to flow paths between the sleeve layer 90 and spool layer 80." Thus, Shiery fails to describe or suggest a flexible means that covers a hole to form a barrier that prevents fluid from flowing through the hole, as recited in claim 1.


Bychinsky fails to remedy the above noted deficiency of Shiery with respect to claim 1. In particular, Bychinsky fails to describe or suggest a flexible means that covers a hole to form a barrier that prevents fluid from flowing through the hole. Instead, Bychinsky is directed to a silencer element divided into a plurality of open compartments by spaced apart intermediate wall portions. Col. 3, lines 16-41. Each intermediate wall portion (e.g., 48) has an exhaust opening (e.g., 58). Each compartment includes a flow diverting baffle (e.g., 60) to prevent linear flow of exhaust through the exhaust openings (e.g., 58). Unlike Applicant's claim 1, among other things, Bychinsky has no flexible means covering the hole (exhaust openings) to form a barrier that prevents fluid from flowing through the hole. In fact, if Bychinsky were to have such a barrier, there would be no available flow path for exhaust through the silencer element 10, which would alter the principle of operation of Bychinsky and Bychinsky would not work for its intended purpose.

Claims 5-11 depend from claim 1, and are believed to be allowable for at least the reasons given for claim 1.

It is respectfully submitted that all claims are in condition for allowance, and early notice of the same is respectfully solicited. Please charge any charges or credits to Deposit Account 50-0958. If any questions remain, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

Date: March 26, 2007



Scott R. Boalick
Reg. No. 42,337

Customer No. 38092
Office of Counsel (Patents)
Naval Surface Warfare Center
Carderock Division
Code 004
9500 MacArthur Blvd.
West Bethesda, MD 20817-5700

(301) 227-1835